FINAL REPORT

45 Solar Cookers for 264 Tibetans

TO

Mr. Andrew Sewell & Ms. Lorraine de Beaufort

Summary

What? 45 solar cookers for 45 Tibetan households (264 Tibetans)

Where? Luqie সুবাস্থ্ৰ ' 陆切 Village, Xinjie গ্রাম 新街 Township, Guide ন্রাম 贵德 County, Hainan

মার্ক্টার্কু 海南 Tibetan Autonomous Prefecture, Qinghai মার্ক্টার্কুর 青海 Province, PR China

Cost? Andrew & Lorraine = 5,075.64 RMB; Villagers = 2,250.00 RMB

from
Drolma Dundrup শ্লুবে'ম'ৰ্ন্'ব্যুবা

Photographs



and valleys, which was very difficult on rainy and snowy days."



Ms. Lharitso's বুংইশ মার্ক্ত্র- (b. 1959) new solar cooker can cook a meal in half an hour. Her family includes her grandmother Norbukyid ব্রুমন্ত্র- শ্রুড়িড্র- (b. 1936), her husband Shamba হুমান্ত্র- (b. 1957) and her two sons (b. 1987, 1989).

Ms. Lharitso is mainly responsible for collecting fuel and cooking. She said, "My solar cooker is very useful and relieved the burden I have been under since I was a child. It cooks food and boils water very quickly and efficiently. Before I searched in the mountains and valleys for wood and I also had to cook for my family in our smoky adobe kitchen. Now I cook every meal on the solar cooker when the sun shines."



Ms. Bengchangmtso's মুন্দ্রিম্মের্ক্ট (b. 1946) household is one of the poorest village families. There are 3 people in her family--her husband (b. 1943) and their grandson. She said, "I really like my solar cooker. It efficiently boils a kettle of water in 20 minutes. Now I don't need to go as often as before to distant mountains to collect dung."



Ms. Gongbogyid মর্শ্রন্থ (b. 1979) boils tea with her solar cooker for her family: her mother, Lumotso মুর্মামর্জ (b. 1946), her husband, Lubun মুরের্ম (b. 1974) and her son, Mujiao Dorjee য় প্রত্ ই ই (b. 1994), who attends the village primary school. Ms. Gongbogyid and her Mujiao Dorjee are responsible for collecting fuel. She said that the solar cooker boils a kettle of water in less than 20 minutes. She has more time to cook and make shoes for her family with the time she previously spent on collecting fuel.

Letter of Appreciation

Dear Mr. Sewell and Ms. de Beaufort,

I am very pleased to inform you that the Luqie Tibetan Village Solar Cooker project has been successfully completed. Villagers now use the solar cookers you helped finance to cook and boil water.

I am very grateful for your support that has greatly improved the villagers's lives and is also very beneficial to the local environment. Women and girls' work is easier because they do not need to spend so much time on fuel collection; they have more free time to attend school and do housework.

Prior to completion of this project, villagers bought coal for winter, which cost about 300 RMB, for cooking and heating; this is a large amount for them and reduced the amount of cash they had to buy fertilizer and chemical agents that increase their crop yields. Lower crop yields, in turn, meant they had less money for their children's education and to meet other expenses. Girls, always, seem to be the losers when money is tight, e.g., they are pulled out of school.

The villagers often have smoke-filled houses because of the cooking fires; women must cook for the family. This smoke harms their lungs and causes many health problems that require money for treatment.

Since the solar cookers now do much of the cooking, families spend much less money buying coal. Furthermore, less fuel is collected from forests and mountains, contributing to an improved environment.

Sincere thanks for your generosity.

ฐัญมรัฐ วุฐฦ Drolma Dundrup (Joe)

Village Background

Luqie Tibetan Village, with a 95% Tibetan population, is located east of Heying Town, the capital of Guide County, Hainan Tibetan Autonomous Prefecture, Qinghai Province. It is 155 km from Xining 章章 古文 City, the capital of Qinghai Province. This area is particularly poor and impoverished. A few Han Chinese and Hui also dwell in the village. The villagers primarily are farmers; their main source of income is the sale of rapeseed and wheat. At times, young villagers collect and sell medicinal herbs. The average annual per person income is 100-150 RMB.

The population of this village is 1,453 people (254 households). Over 90% of the villagers are illiterate.

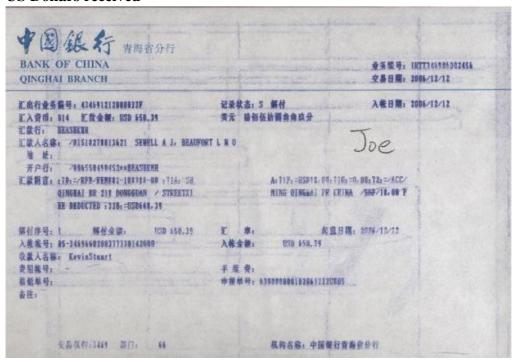
During winter, women and girls in Luqie often get up at around 5 a.m. and go to the mountains to collect dung and fuel from the forests. In winter, they try to create piles of yak dung to dry and then use it in summer. In summer, their labour is needed for many other important activities, such as fieldwork. The distance from the village to the mountain is about 7 km, and it takes almost 5 hours to get there. It takes 3-5 hours to collect fuel from the forest. One sack of fuel lasts about 3 days.

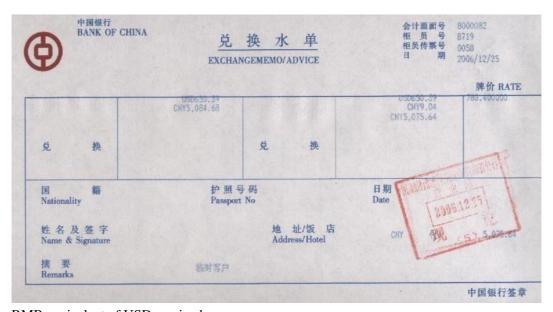
Villagers collected bushes from a small forest 6 km from the village until 2002 when the government forbad them to do this. Now, if they go there for fuel and are caught, they are punished. In 2007, they only collected dung and wood near the forest. There is less dung produced yearly, because people are replacing livestock used for work (ploughing, etc.) with tractors.

Finances

Funds Received = 5,075.64 RMB
Local Contribution = 2,250.00 RMB
Total Funds = 7,325.64 RMB
1 solar cooker = 160.00 RMB
45 solar cookers bought = 7,200.00 RMB
Bus tickets and phone calls 125.65 RMB

US Dollars received





RMB equivalent of USD received



Funds sent to the solar cooker factory.

Evaluation

On October 1, 2006, I interviewed 9 villagers and on May 1, 2007 I interviewed the same villagers; these results are presented below. These results suggest:

- the number of times of collecting fuel has been reduced from 60 times per month to only two;
- the number of times of collecting fuel in winter has been reduced from 40 times to only 5;
- a sack/basket of fuel that lasted 2 days now lasts 6 days, which suggests that the amount of fuel burnt by a household in one year has decreased from 6,228 kg to 2,129 kg;
- the amount of non-fuel collecting time per day has increased 4-5 hours; and
- the amount of cash spent on coal has decreased by about 270 RMB annually.

Question	Question	Before Project	After Project
#	777 . 1 . 1		G
1	What do you burn to cook food?	Dung, wood, and grass.	Same
2	Where do you go to get it?	Mountains.	Same
3	How far is that place from your home?	5.2 KM	Same
4	What do you use to collect it?	Sacks and bags	Same
5	How many times do you go in one day?	Twice	5 times a month
6	How much time do you use to fill one sack/basket?	2-3 hours	Same
7	How often do you go to collect it	5 days a week in winter; 2 collection	5 trips in
	(summer/winter)?	trips daily	winter
8	How many days does a sack/basket last?	2 days (= 6,388 kg/year)	6 days (2,129
			kg/year)
9	How much time do you have in a day to	2-3 hours	7 hours
	do other things besides collect fuel?		
10	How many people in your family collect	1 person	1 person
	fuel?		
11	What is the most difficult thing in	Flood waters, high mountains, cold in	No difficulties
	collecting fuel?	winter, far distances and lack of fuel.	
12	How difficult is collecting fuel?	Very hard	Not hard
13	How much cash can you make in one	1,300 RMB	1,700 RMB
	year?		
14	How much do you spend on coal per	370 RMB	~100
	year?		

Interviews in Luqie Village 1-4 October 2006 &1-5 May 2007 by Drolma Dundrup

	Interviewee						Q	UES	TIONS	<u>.</u>						
			1	2	3	4	5	6	7 ¹	8	9	10	11	12	13	14
															RMB	RMB
	Name	Kungamtso	Dung and	Waugang ব্যার্থ শ্বুহ Mt west of	5	Basket and	Twice daily	2 hours	W=6 days	15	4 hours	1	Walking on ice in	Hard	~ 1,000	350
1	Sex	Female	coal	the village.	KM	sacks ²			weekly	day		person	winter			
	b.	1971														
				After the Project			Once a week	2 hours	W=8 days	5 days	10	1	No difficulties	Not	~1,500	150
											hours	person		hard		
	Name	Yidam	Dung and	Yezangthang শৃত্যক্ষ্যান্ত্রীর প্ররণ Mt	6	Sacks and	Once or	2-3	W=5days	2 days	2-3	1	Very high	Very	~1,200	400
2		Gyamtso	wood	east of the village	KM	baskets	twice daily	hours	weekly		hours	person	mountains	hard		
	Sex	Male														
	b.	1966														

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¹ The villagers have the concept that 'winter' is the 4 weeks around the Lunar New Year period. October to February. In summer, the interviewees collect wood once or twice a month that has washed up along a river that runs near the village.

² Sack = a bag made of sheep or yak hair that is 1.5-2 meters long and about 0.5 meters in diameters. It weighs around 30-40 kg if it is filled with dung. Donkeys commonly carry such bags. If a family does not have a donkey, a person might carry this bag. Basket = woven from willow branches and carried by people with the help of a rope. Baskets are different in size, the common one weighs 35 kg filled with dung and 40 kg filled with wood.

				After the Project		Once or tv	vice a month	2-3	W = 5	6	9 hours	1 person	No difficulties	Not	~1,700	200
								hours	days	days				very		
														hard		
3	Name	Chosdan	Wood	Waugang Mt west of the village	5	Sacks	Twice daily in	3	~ Daily	2	3 hours	Interviewee	Far; limited fuel source	Very	~1,500	Don 't
	Sex	Male	and		KM		winter	hours	in	days		and his wife		hard		burn it
	b.	1960	dung						winter							
				After the Project			Five times a	3	W=6	5	10 hours	Interviewee	No	Not	~1,800	Don't
							month in	hours	days	days		and his wife		very		burn it
							winter							hard		
4	Name	Benchangmtso		Yezangthang Mt east of the village	6	Sacks	Twice daily	2-3	W=20	2	2-3 hours	1 person	Cold; many times the	Hard	~1,000	350-400
	Sex	Female	Wood		KM			hours	days	days			limbs are swollen			
	b.	1946	and													
			coal													
				After the Project			Twice a one	2-3	W = 7	6	10 hours	1 person	No difficulties	Not	~1,600	170
				T			week	hours	days	days				hard		
5	Name	Rnamgyalmtso	Dung	Yezangthang Mt east of the village	6	Sacks	Twice daily	~3	Daily in	2	Don't know	1 person	Shortage of fuel and high	Very	~1,200	350
	Sex	Female	and		KM			hours	winter	days	exactly		mountains	hard		
	b.	1939	coal						except							
									festivals							
				After the Project			Four times a	3	6 days	7	8 hours	1 person	No	Not	~1,700	150
					1	T	month	hours		days				hard		
6	Name	Sgrunkarmtso	Dung	Josar ই'শ্বন Mt north west of the	4	Sacks	Twice or	2-3	Daily in	1.5	2-3 hours	1 person	Danger from floods, cold	Hard	~1,100	Don't
	Sex	Female		village	KM	and	more times	hours	winter	day			and ice			burn it
	b.	1959				baskets	daily									
			After the Project			Three times a	2-3	5 days	6	8 hours	1 person	No	Not	~1,800	Don't	
							month	hours		days				hard		burn it
7	Name	Gyangdrunmtso		Yezangthang Mt east of the village		Sacks	Twice daily				3 hours	1 person			~1,300	400

	Sex	Female	Wood		6			3					Far distances and high			1
	b.	1979	and		KM			hours					mountains			l
			dung													
				After the Project			Twice a week	3	W=7	5	7 hours	1 person	Not many difficulties	Not	~1,900	200
								hours	days	days				hard		
8	Name	Lharimtso	Dung	Josar Mt northwest of the village	4	Sacks	Twice daily	3	W=16	2	3 hours	1 person	Far and cold; the limbs	Hard	~1,200	Don't
	Sex	Female	and		KM			hours	days a	days			swell			burn it
	b.	1959	grass						month							l
				After the Project			Three days a	3	W= 5	7	8 hours	1 person	Not many difficulties	Not	~1,700	Don't
							month	hours	days	days				hard		burn it
9	Name	Tseringsgyid		Near the forest (it is forbidden to	~5	Baskets	3 times daily	3-4	W=15	2.5	2 hours	1 person	Takes a long time;	Hard	~1,000	Don't
	Sex	Female	Wood	collect wood in the forest)	KM			hours	days a	day			distance is far			burn it
	b.	1966							month							l
				After the Project			5 times a	3-4	7 days	6	8 hours	1 person	No difficulties	Not	~1,600	Don't
							month	hours	in	day				hard		burn it
									winter							

Recipients' Names and Fingerprints

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